



UNISECO



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Soil conservation farming in Hungary

Practical lessons learnt on farm level



Photo: Katalin Balázs

Understanding and Improving the Sustainability of Agro-ecological Farming Systems in the EU

ISSUE BRIEF

Farmers need knowledge and advisory support to accompany them along the systemic change, as well as scientific evidence to ensure the economic viability of soil conservation practices.

The specific sustainability challenge is how to adopt soil conservation practices in highly market-oriented arable farming systems, to maintain and improve soil quality without significant disruptions to the economic viability of farms. We assessed the socio-economic conditions for the adoption of such practices.

Know-how & technological gaps

The key barriers for the generic uptake of soil conservation practices among farmers include lack of knowledge and openness to alternative practices and lack of specific advisory services. Although biophysical conditions for crop production in Hungary are generally good, extreme weather events, water shortage during the growing season and deterioration of soils poses increasing environmental challenges to farmers.



Photo: Katalin Balázs

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Related to UNISECO case study:

[Soil conservation farming in Hungary to improve the environmental-economic sustainability at farm level](#)

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Strengthening capacity building & cooperation

Resolving the barriers require national level central initiation, and cooperation of different actors from the practice-science-policy domains. Practitioners can help this process by sharing their experiences about soil conservation practices, but also by cooperating with academia, private companies, public bodies and NGOs through the below mentioned initiatives.

There is a need for: (1) creating an independent professional and practical network to promote good soil condition, (2) practice-oriented advisory coupled with research also multidisciplinary studies about the economic feasibility of conservation agriculture practices, (3) enhancing the role of the Chamber of Agriculture as a coordination centre for independent advisory services.

POTENTIAL OUTCOMES

Maintaining the qualities of soil, retaining water and improving soil health shall represent inherent and immediate economic interest for farmers. By adopting soil conservation farming practices the overall operational costs can be reduced (e.g. fuel consumption by 18 %, machinery costs by 11 % according to our analysis) while water can be retained, soil biota supported and CO2 emissions substantially lowered.

FURTHER INFORMATION

Case study page and link to story map, downloadable materials:

<https://uniseco-project.eu/case-study/hungary>

ABOUT UNISECO:

UNISECO is a European research project aiming to develop innovative approaches to enhance the understanding of socio-economic and policy drivers and barriers for further development and implementation of agro-ecological practices in EU farming systems.

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<https://cordis.europa.eu/project/id/773901>

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